

NPDES Permit No. IL0004375

Illinois Environmental Protection Agency

Division of Water Pollution Control

2200 Churchill Road

Springfield, Illinois 62706

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

Reissued (NPDES) Permit

Expiration Date: March 31, 1981

Issue Date: Nov. 28, 1978

Effective Date: Jan. 1, 1979

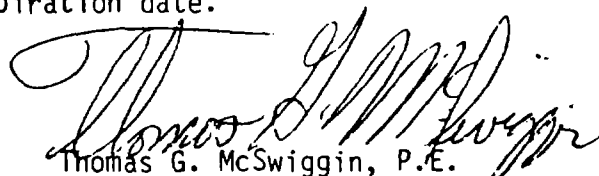
Permittee: Cabot Corporation

Receiving Waters: Scattering Forks Creek via Drainage District #4 tile
to Embarras River

Location: Rte. 133 Near Tuscola (Douglas County)

In compliance with the provisions of the Illinois Environmental Protection Act, the Chapter 3 Rules and Regulations of the Illinois Pollution Control Board, and the FWPCA, the above-named permittee is hereby authorized to discharge at the above location to the above-named receiving stream in accordance with the standard conditions and attachments herein.

Permittee is not authorized to discharge after the above expiration date. In order to receive authorization to discharge beyond the expiration date, the permittee shall submit the proper application as required by the Illinois Environmental Protection Agency (IEPA) not later than 180 days prior to the expiration date.



Thomas G. McSwiggin, P.E.
Manager, Permit Section
Division of Water Pollution Control

TGM:JDR:bl/sp/3791a

EPA Region 5 Records Ctr.



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ATTACHMENT B 1

Final

Effluent Limitations and Monitoring

Discharge Number: 001 A
Discharge Name: Pump Seal Water

From effective date of this permit until March 31, 1981, the effluent of the above discharge shall be monitored and limited at all times as follows:

PARAMETER	CONCENTRATION LIMITS mg/l		LOAD LIMITS lbs/day (Kg/day)		SAMPLE FREQUENCY	SAMPLE TYPE
	30 DAY AVERAGE	DAILY MAXIMUM	30 DAY AVERAGE	DAILY MAXIMUM		
Flow (MGD)					Daily	Continuous
Effluent SS		15	7.1 (3.2)	8.9 (4)	1/week	Composite
Effluent pH	See Attachment B 1 Continued				1/week	Grab
Total Dissolved Solids	See Attachment B 1 Continued				1/week	Composite

ATTACHMENT B 1 CONTINUED

1. The pH shall be in the range 6.0 to 9.0.
2. Total dissolved solids shall not be increased more than 750 mg/l above background concentration levels and in no case shall the concentration of 1000 mg/l be exceeded in the receiving stream.
3. Samples taken in compliance with the effluent monitoring requirements shall be taken at a point representative of discharge but prior to mixing with other waste streams.
4. The permittee shall record monitoring results on Discharge Monitoring Report Forms using one such form for each discharge each month.

The completed Discharge Monitoring Report forms shall be mailed and received by the IEPA no later than the 15th day of the following month, unless otherwise specified by the permitting authority.

Discharge Monitoring Reports shall be mailed to the IEPA at the following address:

Illinois Environmental Protection Agency
Division of Water Pollution Control
2200 Churchill Road
Springfield, Illinois 62706

Attention: NPDES Unit (DMR)

Additionally, Discharge Monitoring Report forms shall be mailed to United States Environmental Protection Agency in Chicago on a quarterly basis. The permittee shall submit the reports as follows, unless otherwise specified by the permitting authority.

Period	Report Due At
	U.S. Environmental Protection Agency
Jan, Feb, Mar	April 28th
April, May, June	July 28th
July, Aug, Sept	October 28th
Oct, Nov, Dec	January 28th

Reports shall be addressed to United States Environmental Protection Agency as follows:

NPDES Compliance Unit
United States Environmental Protection Agency
Region V
230 South Dearborn Street
Chicago, Illinois 60604

The Permittee shall also notify the United States Environmental Protection Agency of any excursions as required by Standard Condition Number 12.

Final

Effluent Limitations and Monitoring

Discharge Number: 001 B

Discharge Name: Sanitary Treatment

From effective date of this permit until March 31, 1981, the effluent of the above discharge shall be monitored and limited at all times as follows:

PARAMETER	CONCENTRATION LIMITS mg/l		LOAD LIMITS lbs/day (Kg/day)		SAMPLE FREQUENCY	SAMPLE TYPE
	30 DAY AVERAGE	DAILY MAXIMUM	30 DAY AVERAGE	DAILY MAXIMUM		
Flow (MGD)					Daily	Continuous
Effluent BOD ₅	4	10	0.25(0.11)	1.5(.68)	1/week	Composite
Effluent SS	5	12	0.3(0.14)	1.8(.8)	1/week	Composite
Effluent Ammonia						
Nitrogen as (N)	See Attachment B 2 Continued				1/week	Composite
Effluent Fecal						
Coliform		400/100 ml			1/week	Grab
Effluent pH	See Attachment B 2 Continued				1/week	Grab

ATTACHMENT B 2 CONTINUED

1. The pH shall be in the range 6.0 to 9.0.
2. The effluent ammonia nitrogen concentration in the subject discharge shall be limited to a level that will not cause the receiving stream to exceed the water quality standard in Rule 203 of the Illinois Pollution Control Board, Chapter 3, Rules and Regulations.
3. Samples taken in compliance with the effluent monitoring requirements shall be taken at a point representative of discharge but prior to mixing with other waste streams.
4. The permittee shall record monitoring results on Discharge Monitoring Report Forms using one such form for each discharge each month.

The completed Discharge Monitoring Report forms shall be mailed and received by the IEPA no later than the 15th day of the following month, unless otherwise specified by the permitting authority.

Discharge Monitoring Reports shall be mailed to the IEPA at the following address:

Illinois Environmental Protection Agency
Division of Water Pollution Control
2200 Churchill Road
Springfield, Illinois 62706

Attention: NPDES Unit (DMR)

Additionally, Discharge Monitoring Report forms shall be mailed to United States Environmental Protection Agency in Chicago on a quarterly basis. The permittee shall submit the reports as follows, unless otherwise specified by the permitting authority.

Period	Report Due At U.S. Environmental Protection Agency
Jan, Feb, Mar	April 28th
April, May, June	July 28th
July, Aug, Sept	October 28th
Oct, Nov, Dec	January 28th

Reports shall be addressed to United States Environmental Protection Agency as follows:

NPDES Compliance Unit
United States Environmental Protection Agency
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The Permittee shall also notify the United States Environmental Protection Agency of any excursions as required by Standard Condition Number 12.

ATTACHMENT B 3

Final

Effluent Limitations and Monitoring

All inquiries should be directed to Mr. Rauf Piskin, Manager, Hydrogeology Unit, Technical Operations Section, Division of Land/Noise Pollution Control.

The Standard Conditions of issuance of the Permit are enclosed.

The Special Conditions of issuance of this permit are on the following pages.

This permit is issued for the injection of industrial waste at a maximum rate of 400 GPM and at a maximum injection pressure (at the wellhead) 50 psig through No. 2 well or No. 1 well (standby).

The wastes to be injected consist of hydrochloric acid, chloride salts and silicon dioxide particulates from Cabot Corporation; nitric acid, zinc nitrate, trisodium phosphate and aromatic solvent from R.R. Donnelly (averaging 30 tons or 7200 gallons per month); up to 1,900,000 gallons per month from A.E. Staley Manufacturing Company according to conditions of Supplemental Permit #1975-EB-1316-OP-3, dated July 20, 1977.

The injection wastes shall be sampled daily (if waste is injected) at the wellhead, and a weekly composite sample made and analyzed. The analysis report shall include suspended solids, total chloride, total dissolved solids, total chlorides, and any parameters which are in significant amounts or which are needed to adequately characterize the wastes.

Monthly operating reports must be submitted in one copy to the following three addresses:

1. Illinois Environmental Protection Agency
Division of Land/Noise Pollution Control
Technical Operations Section, Hydrogeology Unit
2200 Churchill Road
Springfield, Illinois 62706
2. Illinois State Water Survey
Post Office Box 232
Urbana, Illinois 61801

ATTACHMENT B 3

Final

Effluent Limitations and Monitoring

3. Illinois State Geological Survey
Natural Resources Building
University of Illinois
Urbana, Illinois 61801

The transmittal letter shall indicate that the above three addresses were copies.

The monthly operating reports shall contain as a minimum the following:

1. the total number of hours of injection during each day.
2. the total number of gallons of waste injected each day.
3. the total number of gallons of waste injected during the month and the total number of gallons of waste injected since the well began operation.
4. the maximum injection pressure for each day.
5. the maximum injection rate for each day.
6. the maximum and minimum annulus pressure for each day.
7. analyses from the weekly sampling of the injection waste.
8. the need to add fluid to the annulus of injection wells.
9. at least monthly, the viscosity and specific gravity should be measured, the temperature of the sample at the time of collection and the temperature of the sample at the time of measurement shall be recorded and reported.
10. a summary of any operational difficulties encountered, including reasons for any alarms and a description of any changes in the operation of the deep well system or wastes injected; if any maintenance is performed during the month, a detailed report shall be submitted, including a written daily description of activities during the rework period, copies of logs run, and a revised well drawing showing casing, injection tubing and downhole appurtenances (showing material description, specifications and model designation, manufacturer, etc.), names and addresses of service companies performing the service function, and Company's consultant name supervising the repair work.

ATTACHMENT B 3

Final

Effluent Limitations and Monitoring

11. once per quarter, a representative set of well operation charts for a one week period shall be submitted along with the monthly report (January, April, July, October).

The injection data shall be reported on forms supplied by this Agency. A permanent record should be kept of all recording charts for deep well instruments. These records should be open to reasonable inspection by appropriate State agencies.

The Hydrogeology Unit, Division of Land/Noise Pollution Control, shall be notified immediately if any situation occurs which could result in pollution to the water of the State.

SPECIAL CONDITIONS:

This Permit is issued subject to the following Special Conditions. If such Special Conditions require additional or revised facilities, satisfactory engineering plan documents shall be submitted to this Agency for review and approval for the issuance of a Supplemental Permit.

SPECIAL CONDITION #1: The No. 2 well, which was completed in 1976, shall be the main disposal well. The No. 1 well shall be used when an emergency occurs or when the No. 2 is down for repair or maintenance.

SPECIAL CONDITION #2: The No. 1 well shall be tested to determine its operating conditions with the said waste in this permit or, preferably, with water, at least once a month. The test results shall be included in monthly operating reports.

SPECIAL CONDITION #3: Within 30 days of the date of this permit, a testing program shall be completed to determine the condition of the well injection tubing and casing in both wells by the permittee; such a program shall be submitted to the Agency for review and approval.

SPECIAL CONDITION #4: An evaluative report, to indicate the conditions of tested tubings and casings, shall accompany the test results and/or logs when they are submitted to the Agency with monthly operating report.

SPECIAL CONDITION #5: Monthly operating reports shall include the amounts of waste received from both R.R. Donnelly and A.E. Staley in gallons.

ATTACHMENT B 3

Final

Effluent Limitations and Monitoring

SPECIAL CONDITION #6: Should changing injection conditions so warrant during the term of this permit, the Agency may require modifications of permit conditions or modifications to the deep well injection facilities, including surface works and downhole facilities, to insure the integrity of the system and to insure adequate protection to the waters of the State.

SPECIAL CONDITION #7: Deep well injection facilities permit shall become a part of NPDES Permit at time of issuance. On October 8, 1979, date of expiration of existing deep well permit, deep well permit may be reissued and would remain a part of NPDES Permit.